

**House Science Committee
Subcommittee on Environment, Technology and Standards
Hearing on “Weatherproofing the U.S. - Are We Prepared For Severe Storms?”**

October 11, 2001

MEMBERS PRESENT

Rep. Vernon Ehlers (R-MI), Chairman
Rep. James Barcia (D-MI), Ranking Minority Member
Rep. Gil Gutknecht (R-MN)
Rep. Bob Etheridge (D-NC)
Rep. Dennis Moore (D-KS)
Rep. Lynn Rivers (D-MI)

WITNESSES

Dr. Chris Landsea, Research Meteorologist, Hurricane Research Division, Atlantic Oceanographic and Meteorological Laboratory, NOAA

Dr. Len Pietrafesa, Director of External Affairs, College of Mathematical Sciences, North Carolina State University

Dr. Steven L. McCabe, Professor and Department Chair, Department of Civil and Environmental Engineering, University of Kansas

Dr. Jack Hayes, Director, Office of Science and Technology, National Weather Service, NOAA; Co-Chair, U.S. Weather Research Program

Doug Hill, Meteorologist, WJLA - Channel 7 News, Washington, DC

Robert F. Shea, Acting Administrator, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency (FEMA)

QUESTIONS AND ANSWERS

- Q. (Ehlers) If I understand the testimony of the panel, we are doing much better at weather prediction, somewhat better at warnings, but not doing better on damage mitigation. What can we do to improve damage mitigation?
- A. (Pietrafesa) We need to look at better environmental management practices; we need to look at what we build and where; and, we need to better understand the events themselves.

- Q. (Gutknecht) Asked what USWRP is doing with research into winter storms?
- A. (Hayes) Within the USWRP quantitative precipitation forecasting is lagging behind, but we are making progress in improving precipitation forecasts, for all types of storms, including winter storms.
- Q. (Ehlers) Are the increasing concentrations of CO₂ in the oceans and atmosphere impacting the number of hurricanes?
- A. (Landsea) Based on our current research, at most there is a small impact, on the order of a possible increase in wind speeds of up to 5 miles per hour.
- Q. (Ehlers) Is there a possibility of a shift in the locations of hurricanes, either where they are generated or where they will strike due to global climate change?
- A. (Landsea) No, areas of formation, and of strikes probably won't change.
- Q. (Etheridge) Is there a difference in forecasting precipitation forecasting for tropical cyclones as opposed to other storm events?
- A. (Hayes) There are unique features of tropical cyclones that need specialized research.
- Q. (Etheridge) Would an inland flood index be used as a tool for the science community, or for the public?
- A. (Pietrafesa) Ultimately, an inland flooding scale should be for the benefit of the public, but also be useful to the science community. The NWS' AHPS system, currently in development, and my research on estuarine flood models could be combined to address the issue of the inland flood index contemplated by the Etheridge bill.
- Q. (Ehlers) Which agency should be responsible for developing a flood index?
- A. (Shea and Hayes) FEMA suggested, and NWS agreed, that NWS should be the agency responsible for developing and disseminating a flood index.
- Q. (Etheridge) What is your opinion of the understanding of the media weather reports by the public audience?
- A. (Hill) The media does the public a disservice by creating mixed messages in reporting. Currently, broadcasters are not required to broadcast the weather warnings. WTOP was the only radio station in the DC Metro area to broadcast warnings of the recent tornadoes that struck the University of Maryland campus. During these broadcasts, WTOP also provided practical tips for the public. My general feeling is that broadcasters do not know enough about the dangers of severe storms themselves, therefore, they don't convey the dangers to their listening audience.

- Q. (Ehlers) Isn't it mandatory for television and radio stations to activate the Emergency Broadcast System, and announce severe weather alerts?
- A. (Hill) No, it is not mandatory for broadcasters to announce these warnings or activate the EBS.
- Q. (Ehlers) What do we currently do in the media to broadcast severe storm forecasts and warnings?
- A. (Hill) Broadcasters read from the scripts provided by the National Weather Service. These scripts do have advisories listed at the end telling the public steps they should take to seek safety from the severe weather, but these are generally ignored by broadcasters.